ANALYST:	VPDES NO	
----------	----------	--

Parameter: Oil & Grease Method: Partition Gravimetric 05/04

٨	Λ⊏Τ	Γ \square C	חר	$\cap E$	ΛNI	ΛI	YSIS
ı١	/11	111	JU	OI.	\neg	ᇧᆫ	. 1 010

18th EDITION OF STANDARD METHODS-5520 B

EPA METHODS FOR CHEMICAL ANALYSIS-413.1

	EPA METHODS FOR CHEMICAL ANALYSIS-413.1		
		Υ	N
1)	Is an analytical balance (0.1 mg) used in weighing operations? [Permit]	-	
2)	Is an adequately sized desiccator available, equipped with active indicating desiccant? [SM5520B-2.l; 413.1-7.3]		
3)	Is the only Freon used manufactured prior to Jan. 2002? [40 CFR Part 82]		
4)	Is the extraction performed with a 2 liter separatory funnel, fitted with a Teflon stopcock? [SM5520B-2.a; 413.1-5.1]		
5)	Is solvent layer drained through approximately 10 g of sodium sulfate (Na ₂ SO ₄)? [SM5520B-4; 413.1-7.4]		
6)	Is reagent grade solvent used for the procedure? [Permit]		
7)	Is sample bottle clean and rinsed with fluorocarbon 113 (Freon)? [SM5520B-4; 413.1-7.2]		
8)	Is the sample bottle marked at the meniscus for later determination of sample volume? [SM5520B-4; 413.1-7.1]		
9)	Is sample volume recorded on the bench sheet? [Permit]		
10)	Is entire sample transferred into separatory funnel? [SM5520B-4; 413.1-7.2]		
11)	Is 30 mL of solvent used with each extraction? [SM5520B-4; 413.1-7.4]		
12)	Is the sample container rinsed with each solvent portion? [SM5520B-4; 413.1-7.5]		
13)	Is all contact between plastic and solvent prevented? [Permit]		
14)	Is solvent and sample vigorously shaken for 2 minutes for each extraction? (Disregard if a stable emulsion would result from vigorous shaking.) [SM5520B-4; 413.1-7.4]		
15)	If a stable emulsion would result from vigorous shaking is each extraction gently shaken for 5 to 10 minutes? [Permit]		
16)	Are 3 extractions performed on each sample? [SM5520B-4; 413.1-7.5]		
17)	Are liquid layers allowed to separate? [SM5520B-4; 413.1-7.4]		
18)	Is solvent layer drained through filter paper (Whatman 40 or equivalent)? [SM5520B-4; 413.1-7.4]		
19)	Is filter paper pre-moistened with solvent? [SM5520B-4; 413.1-7.4]		
20)	Is the solvent layer collected in a clean tared 125 mL distilling flask? [SM5520B-4; 413.1-7.4]		
21)	Following the third extraction is the tip of the separatory funnel and the filter paper rinsed with a 10 - 20 mL portion of solvent? [SM5520B-4; 413.1-7.6]		
22)	Is the tared weight of the distilling flask recorded? [Permit]		
23)	Is the tared distilling flask distilled in a 70° C ± 2° C water bath? [SM5520B-4; 413.1-7.7]		
24)	Is the sample allowed to distill until the flask appears dry or distillation head reaches 50° C? [413.1-7.8]		

		Υ	N
25)	Following distillation is the flask swept of solvent fumes with a vacuum? [SM5520B-4; 413.1-7.8]		
26)	Is the flask wiped of moisture and finger prints, and placed in a desiccator for 30 minutes, prior to weighing? [SM5520B-4; 413.1-7.8]		
27)	Is the weight of the distilling flask and residue recorded? [Permit]		
28)	Is the calculation correct and shown on the bench sheet? [SM5520B-5; 413.1-8.1]		
	O & G mg/L = $(A - B) \times 1000$ mL sample		
	Where A = total gain in weight of tared flask B = calculated residue from solvent blank		
29)	Is a solvent blank run with each series of samples? [SM5520 B-5; 413.1-7.7]		
30)	Is glassware solvent rinsed after cleaning? [Permit]		

PROBLEMS: